



PTO/SB/08A (08-03)
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| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | 10/771,087 | | |
| | | Filing Date | February 3, 2004 | | |
| | | First Named Inventor | Frederick B. Growcock | | |
| | | Group Art Unit | 1712 | | |
| | | Examiner Name | Not Yet Known | | |
| Sheet | 1 | of | 1 | Attorney Docket Number | 2223-04501 |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|--------------------------|--|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number-Kind Code ² (if known) | | | |
| PC | AA | US-6,716,797 | 04/06/2004 | Brookey | |
| | AB | US-6,739,414 | 05/25/2004 | Brookey et al. | |
| | AC | US-6,770,601 | 08/03/2004 | Brookey | |
| | AD | US-2003/0215946 A1 | 11/20/2003 | Nair et al. | |
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| FOREIGN PATENT DOCUMENTS | | | | | | |
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| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ Number ⁴ Kind Code ⁵ (if known) | | | | |
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| OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ⁷ |
| PT | AE | PCT International Search Report to Application # 60/444,508, PCT/US04/02960 filed February 3, 2004. | |
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| Examiner Signature | P. Tucker | Date Considered | 6/05 |
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*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached. The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORM TO THIS ADDRESS. Send To Commissioner For Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

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| Form PTO-1449 (Modified) SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) | | | | | | Atty. Docket No. 2223-04501 | | Serial No. 10/771,087 | |
| | | | | | | Applicant Fredrick B. Growcock | | | |
| | | | | | | Filing Date 2/3/04 | | Group 1712 | |
| REFERENCE DESIGNATION U.S. PATENT DOCUMENTS | | | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB- CLASS | FILING DATE IF APPROPRIATE | | |
| P.T. | AA | U.S. 6,649,571 | 11/2003 | Morgan | 507 | 102 | | | |
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| FOREIGN PATENT DOCUMENTS | | | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB- CLASS | Translation YES NO | | |
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| OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | | | |
| | AB | PCT International Search Report to Application # 60/444,537, PCT/US04/02947 filed February 3, 2004. | | | | | | | |
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| EXAMINER P. TUCKER | | | | DATE CONSIDERED 6/05 | | | | | |
| EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant. | | | | | | | | | |

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| Form PTO-1449 (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) | | | | | | Atty. Docket No. 2223-04501 | | Serial No. 10/771,087 | |
| <div style="border: 2px solid black; border-radius: 50%; width: 100px; height: 100px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.8em; margin: 0 5px;"> RECEIVED MAY 03 2004 U.S. PATENT & TRADEMARK OFFICE </div> </div> | | | | | | Applicants Frederick B. GROWCOCK et al. | | | |
| | | | | | | Filing Date February 3, 2004 | | Group Not known yet | |

| REFERENCE DESIGNATION OF PATENT DOCUMENTS | | | | | | | |
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| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE IF APPROPRIATE |
| <i>PT</i> | AA | 2,818,230 | 12/31/1957 | <i>Davis</i> | 255 | 1.8 | 02/08/1954 |
| | AB | 3,900,420 | 08/19/1975 | <i>Sebba</i> | 252 | 307 | 09/14/1972 |
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| | AE | 5,314,644 | 05/24/1994 | <i>Michelsen et al.</i> | 261 | 84 | 10/19/1992 |
| | AF | 5,881,826 | 06/16/1999 | <i>Brookey</i> | 175 | 72 | 02/13/1997 |
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| | AJ | 6,390,208 B1 | 05/21/2002 | <i>Brookey</i> | 175 | 72 | 05/07/1999 |
| <i>PT</i> | AK | 6,422,326 B1 | 07/23/2002 | <i>Brookey et al.</i> | 175 | 72 | 06/09/2000 |

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| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | Translation YES NO |
| <i>PT</i> | AL | WO 98/36151 | 08/20/1998 | WIPO | E21B 21/14 | C09K 7/00 | YES <input type="checkbox"/> NO <input type="checkbox"/> |

| OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) | | |
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| <i>PT</i> | AM | Article entitled: "Drill-In Fluids Improve High Angle Well Production," Supplement to the Petroleum Engineer International, March 1995. |
| | AN | Article entitled: "Foams and Biliquid Foams - Aprhons," (Ch. 5, pp. 63-78) by Felix Sebba, John Wiley & Sons, 1987. |
| | AO | Article entitled: "Hidraulica Forajului," translation: YES, pp. 444-455, October 26, 1982. |
| | AP | Article entitled "Microbubbles: Generation and Interaction With Colloid Particles," J.B. Melville and E. Matijevic, Institute of Colloid and Surface Science and Department of Chemistry, Clarkson College of Technology, Potsdam, NY., pp. 217-235, 1975. |
| | AQ | Article entitled "Separation of Organic Dyes From Wastewater by Using Colloidal Gas Aphrons," D. Roy, K.T. Valsaraj, and S.A. Kottai, Marcel Dekker, Inc., Separation Science and Technology, 27(5), pp. 573-589, 1992. |
| | AR | SPE 39589 entitled "Microbubbles: New Aphron Drill-in Fluid Technique Reduces Formation Damage in Horizontal Wells," Tom Brookey, SPE, ActiSystems, Inc., Society of Petroleum Engineers, February 18-19, 1998. |
| <i>PT</i> | AS | Article entitled "Treatability of Water-based Drilling Fluids Using Colloidal Gas Aphrons," D. Roy, K.T. Valsaraj, and V.J. Amedee, Department of Civil Engineering and Chemical Engineering, Louisiana State University, Fluid/Particle Separation Journal, Vol. 5, No. 1, pp. 31-36, March 1992. |

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| EXAMINER <i>P. Tucker</i> | DATE CONSIDERED <i>6/05</i> |
|---------------------------|-----------------------------|

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